

What is claimed is:

1. A voice recognition system comprising:

a standard acoustic model having a standard vector generated according to information on voice;

a first feature vector generation section for reducing noise from an input signal generated from an uttered voice corresponding to a designated text to generate a first feature vector;

a second feature vector generation section for generating a second feature vector from the input signal having the noise; and

a preparation section for generating an adaptive vector based on the first feature vector, the second feature vector and the standard vector, and preparing a speaker adaptive acoustic model suitable for the uttered voice.

2. The voice recognition system according to claim 1, wherein the preparation section compares the first feature vector with the standard vector to obtain a path search result; and

the preparation section coordinates the second feature vector with the standard vector according to the path search result to generate the adaptive vector.

3. The voice recognition system according to claim

1, wherein the noise includes additive noise and multiplicative noise.

4. The voice recognition system according to claim 3, wherein the first feature vector generation section includes an additive noise reduction section for reducing the additive noise from the input signal to generate an additive-noise reduced signal.

5. The voice recognition system according to claim 4, wherein the additive noise reduction section applies a transformation to the input signal to generate a first spectrum and subtracting an additive noise spectrum corresponding to the additive noise from the first spectrum.

6. The voice recognition system according to claim 4, wherein the first feature vector generation section includes a cepstrum calculator for applying cepstrum calculation to the additive-noise reduced signal.

7. The voice recognition system according to claim 6, wherein the first feature vector generation section includes a multiplicative noise reduction section for reducing the multiplicative noise by subtracting the multiplicative noise from the first feature vector.

8. The voice recognition system according to claim 7, wherein the first feature vector contains a plurality of time-series first feature vectors; and

the multiplicative noise reduction section calculates a time average of the time-series first feature vectors for estimating the multiplicative noise.

9. The voice recognition system according to claim 1, wherein the second feature vector generation section applies at least cepstrum calculation to the input signal to generate the second feature vector.